Services, Facilities and Utilities

The Growth Management Act requires coordinated planning so that the services required by new residents and their homes and businesses are available as growth occurs. Needed services include many that are not provided by King County, such as water supply, local sanitary sewers, fire protection, schools, energy facilities, and telecommunications. King County does provide services such as regional wastewater treatment, regional solid waste management, and local stormwater management. This chapter contains policies that guide service provision.

I. Regional Services

King County government is a regional and local service provider. Types of regional services provided include transit, wastewater treatment, and solid waste management. Local services provided to citizens of unincorporated urban King County and the Rural Area include police, building permits, and health and human services. As annexations and incorporations of unincorporated urban areas continue, King County government will focus more on its role as the provider of regional services and protector of the county's Rural Area and Resource Lands. The following policies direct King County's evolving role as regional service provider.

F-101 **King County, the cities, special purpose districts and/or local service providers shall plan as partners. King County's planning will focus on unclaimed urban unincorporated areas and cities' Potential Annexation Areas.**

F-102 **King County shall work with cities, special purpose districts, other local service providers and citizens to identify and distinguish local and countywide services. Over time, cities will assume primary responsibility for coordinating the provision of local services delivery. The county will assume primary responsibility for coordinating the provision of countywide services, including countywide services that must be delivered within city boundaries. The county will also work with cities, special purpose districts, and other counties to identify regional service and facility needs and develop strategies to provide them.**

F-103 **King County will provide or manage countywide services which include but are not limited to:**

- **a. Transit;**
- **b. Economic development;**
- **c. Harborview Hospital;**
- **d. Public health;**
- **e. Regional park, trails and open space systems;**
- **f. Regional wastewater collection and treatment, and reclamation;**
- **g. Solid waste management and recycling;**

h. Hazardous waste management;

i. Water resource management;

j. Surface water management;

k. Flood warning and flood hazard management;

l. Protection and preservation of natural resource lands;

m. ((~~Regional Arterial Network (RAN) and freight mobility~~)) Regional law and criminal justice services (including law enforcement, courts, prosecution, public defense, and the detention of adults and juveniles); and

n. Affordable housing.

F-104 **King County will, in cooperation with special purpose districts and/or local service providers, continue to plan for and provide public services to the Rural Area, consistent with rural standards and needs.**

F-105 **To support the intent of the Growth Management Act, King County should work with cities and other service providers to establish priority areas for public funding of capital facilities, services and infrastructure.**

II. Facilities and Services

A. Providing a Spectrum of Services

King County and numerous service providers need to coordinate planning and funding activities to ensure that needed facilities and services are provided in the region.

F-201 **All facilities and services should be provided in compliance with provisions and requirements of the Endangered Species Act.**

F-202 **King County should seek to create quality communities by defining the needs and proposing strategies for a full range of public facilities and services, including physical infrastructure and health, human and public safety services. King County should ensure that there is an adequate supply of public facilities necessary to support all communities.**

F-203 **King County should work with the cities, special purpose districts and other service providers to define regional and local services and to determine the appropriate providers of those services.**

F-204 **King County shall work with its neighboring counties, the state, Puget Sound Regional Council, special purpose districts, ports and the cities to identify areas of shared need and adequate land supply for public facilities. The county's capital acquisition budget shall reflect the jointly agreed-upon priorities and time schedule.**

F-205 **Public and private community service providers should be encouraged to share or reuse facilities when appropriate to reduce costs, conserve land and provide convenience, access and amenity for the public and to reduce the generation of greenhouse gasses. Joint siting and shared use of facilities should be encouraged for schools, community centers, health facilities, cultural facilities, libraries, swimming pools and other social and recreational facilities.**

B. Urban and Rural Services

Although growth will be directed to Urban Areas, it is recognized that Rural Areas have facility and service needs also.

F-206 **Public spending to support growth should be directed to the Urban Growth Area and prioritized and coordinated through Capital Facility Plans to comply with the concurrency requirements of the Growth Management Act.**

F-207 **In the Rural Area, services provided by agencies should support a rural level of development and not facilitate urbanization.**

C. Identifying Needs for Facilities and Services

Public facilities and services are vital to protect public health, safety and welfare and to protect and enhance community and environmental quality. Inadequate sewage disposal, for example, could directly threaten public health. Inadequate groundwater protection could result in unsafe drinking water and threaten stream flow. Deficiencies in other services, such as police protection or parks, might not raise severe obstacles to any single new development, but over time could cause general threats to public health, safety and welfare and deterioration of community quality.

King County government is responsible for assuring that adequate facilities and services are available or can be made available to support planned growth. This responsibility is carried out by identifying needs for facilities and services based on the planned amount and location of growth. The mechanism for identifying needs is capital improvement programming.

The Growth Management Act requires the county to prepare a capital facility plan that includes an inventory of existing capital facilities owned by public entities, a forecast of the future needs for capital facilities, including the proposed locations and capacities of expanded or new facilities, and a six-year plan that will finance the expanded or new facilities.

The Capital Facility Plan Element for King County is comprised of the following four components:

1. Technical Appendix A is an executive summary of documents containing inventories of facilities and services provided by King County (health and human services and law, safety and justice, transportation, and regional wastewater treatment and reclamation) and those provided by other entities (drinking water supply, sanitary sewer collection and treatment, schools, fire protection, libraries, natural gas, telecommunications, and electricity).

2. Technical Appendix A is an executive summary of documents containing the forecast of future needs for capital facilities, including the proposed locations and capacities of expanded or new facilities:
3. Six-year plan that will finance the expanded or new facilities:
    a. Technical Appendix A is an executive summary of the finance plans for facilities and services provided by the county and other entities.
    b. Technical Appendix A references the Transportation Needs Report, which includes an analysis of funding capability to judge needs against probable funding resources, and a 20-year financial forecast report based on identified needs.
    c. Current adopted King County Capital Improvement Program for facilities other than transportation.
4. Requirement to reassess land use if funding is unavailable to meet existing and future needs:
    a. Policies of Chapter Eight, Part I Facilities & Services, Sections B – F.
    b. Chapter Seven, Transportation, Section IV.

D. Capital Facility Planning

King County and other service providers are required to prepare six-year capital facility plans that describe needs for the six-year facility and propose funding to meet those needs.

F-208 **The capital facility plans and capital improvement programs prepared by all other agencies that provide services to unincorporated areas of the county should be consistent with the King County Comprehensive Plan.**

F-209 **To reduce overall public costs, noise, climate change impacts and disruption to the local area during construction, installation of new or maintenance of existing utility facilities should be timed and coordinated with other projects that utilize public rights-of-way and easements, where possible.**

F-210 **King County's capital facility plans should identify financing strategies to support its adopted 20-year growth target and land use plan.**

F-211 **King County's capital improvement program shall demonstrate that projected needs for facilities and services can be met within the Urban Growth Area and can be served in compliance with the concurrency requirements of the Growth Management Act or, if that is not possible, King County shall determine where and when deficits may occur and how needed facilities and services might be phased in and or financed to serve such deficit areas. Alternative phasing and financing strategies**

must be identified and determined to be infeasible prior to triggering a land use and zoning reassessment under Policy F-216.

F-212 **School districts that choose to have the county collect impact fees for them, and water and sewer utilities that provide their services to unincorporated King County, shall prepare capital facility plans consistent with requirements of the Growth Management Act and King County Code.**

F-213 **Provision of an adequate supply of kindergarten through twelfth grade (K-12) public schools and K-12 public school facilities is essential to avoid overcrowding and to enhance the educational opportunities for our children. King County shall adopt regulations that are supportive of the permitting of K-12 public schools and K-12 facilities.**

E. Addressing Service Deficiencies

In the event that needed facilities and services are not available to support either existing development or growth, King County will work with other service providers to address the service deficiency.

F-214 **King County shall initiate a subarea planning process with any service provider that declares, through their capital facilities plan, an inability to accommodate projected service needs inside their service area.**

F-215 **King County and its cities should coordinate planning for health and human service facilities and services. County investments in health and human service facilities should be targeted primarily to the designated Urban Centers and secondarily to other locations in the Urban Growth Area and Rural Towns.**

F-216 **If an area-wide sewer, water, or transportation service deficiency is identified, King County and the applicable service providers shall remedy the deficiency through a joint planning process addressing capital improvement programs and long-term funding strategies. If financing and level of service remedies cannot solve the deficiency, King County shall change zoning to address the problem.**

F. Financing Strategies

King County, cities, and other service providers will work together to address the financing needs of facilities and services.

F-217 **King County shall work with the cities to create a financing partnership for areas of the Urban Growth Area that the cities will annex. This includes determining county/regional and city/municipal facilities and services and then committing to a shared financing strategy to build or provide these infrastructure improvements or services.**

F-218 **King County should, in cooperation with other jurisdictions, develop funding strategies for governmental infrastructure that take into account economic development goals and consider the costs to, and benefits for, the jurisdictions and the region.**

G. Essential Public Facilities

The region will work cooperatively to site essential public facilities in an equitable manner. Essential public facilities are defined in the Growth Management Act and include large, usually difficult to site facilities such as prisons, solid waste facilities, and airports.

F-219 **Proposed new or expansions to existing essential public facilities should be sited consistent with the King County Comprehensive Plan. Listed existing essential public facilities should be preserved and maintained until alternatives or replacements for such facilities can be provided.**

F-220 **King County and neighboring counties, if advantageous to both, should share essential public facilities to increase efficiency of operation. Efficiency of operation should take into account the overall value of the essential public facility to the region and the county and the extent to which, if properly mitigated, expansion of an existing essential public facility located in the county might be more economical and environmentally sound.**

F-221 **King County should strive to site essential public facilities equitably so that no racial, cultural, or socio-economic group is unduly impacted by essential public**

facility siting or expansion decisions. No single community should absorb an inequitable share of these facilities and their impacts. Siting should consider equity, environmental justice and environmental, economic, technical and service area factors. The net impact of siting new essential public facilities should be weighted against the net impact of expansion of existing essential public facilities, with appropriate buffering and mitigation. Essential public facilities that directly serve the public beyond their general vicinity shall be discouraged from locating in the Rural Area.

F-222 **A facility shall be determined to be an essential public facility if it has one or more of the following characteristics:**

a. The facility meets the Growth Management Act definition of an essential public facility;

b. The facility is on a state, county or local community list of essential public facilities;

c. The facility serves a significant portion of the county or metropolitan region or is part of a countywide service system; or

d. The facility is the sole existing facility in the county for providing that essential public service.

F-223 **Siting analysis for proposed new or expansions to existing essential public facilities shall consist of the following:**

a. An inventory of similar existing essential public facilities in King County and neighboring counties, including their locations and capacities;

b. A forecast of the future needs for the essential public facility;

c. An analysis of the potential social and economic impacts and benefits to jurisdictions receiving or surrounding the facilities;

d. An analysis of the proposal's consistency with policies F-219 through F-222;

e. An analysis of alternatives to the facility, including decentralization, conservation, demand management and other strategies;

f. An analysis of economic and environmental impacts, including mitigation, of any existing essential public facility, as well as of any new site(s) under consideration as an alternative to expansion of an existing facility;

g. Extensive public involvement; and

h. Consideration of any applicable prior review conducted by a public agency, local government, or citizen's group.

F-224 **King County supports coordination of regional water supply planning, sales of excess water supplies among municipalities in the region, water quality programs and water conservation, reuse and reclaimed water programs.**

H. Water Supply

King County is not a water utility that provides potable water to citizens in the region. However, it plays an important role in the coordination or linking of water resources and growth and regional protection and management of water resources. This regional protection and management includes protection of the quantity and quality of groundwater, flood hazard management, protection of fish and wildlife habitat, and commitment to regional water strategies through such efforts as the Puget Sound Partnership, regional water supply planning, salmon recovery planning, and multiple groups engaged on climate change mitigation and adaptation. It carries out this role through its responsibilities for planning, permit issuance, and regulatory oversight. The King County Comprehensive Plan must demonstrate that projected needs for facilities and service can be met within the Urban Growth Area and can be served in compliance with the concurrency requirements of the Growth Management Act. Within Rural Areas, the Comprehensive Plan must provide for rural services, including domestic water service, needed to serve permitted densities and uses. The Utilities Technical Review Committee (UTRC), as authorized in King County Code chapter 13.24, assures that water system and water supply planning by water utilities in King County meet the requirements of the Growth Management Act and other applicable statutory requirements, as well as determining consistency with the King County Comprehensive Plan. The UTRC is responsible for identifying the elements and provisions of the Comprehensive Plan and development regulations, adopted by the county under the Growth Management Act, with which water system plans must be consistent, as prescribed in RCW 43.20.260. The UTRC is also responsible for ensuring that the purposes of chapter 13.24, as provided in KCC 13.24.005, are carried out. Water system plans are ultimately approved by ordinance by the King County Council and King County Executive.

Water utility service areas in King County are described in Coordinated Water System Plans (CWSP's) developed under the Public Water System Coordination Act (chapter 70.116 RCW) and individual water system plans (WSP's) developed under State Board of Health rules adopted under chapter 43.20 RCW. CWSP's describe future service areas for water utilities within which they are provided the exclusive right to serve future customers, and are to include the means for meeting those needs in the most efficient manner possible. Other service providers may serve within the future service area of a designated water utility if the designated water utility is unable to provide service in a timely and reasonable manner. Individual WSP's must include the water utility's retail service area, which includes existing customers and areas where the utility plans future service. Under state law (RCW 43.20.260), the water utility is required

to provide service within its retail service area, provided it can meet the conditions prescribed in state law, including the ability to deliver such service in a timely and reasonable manner. The planned provision of service must be consistent with local government comprehensive plans, land use plans, and development regulations.

The county produces reclaimed water from its existing wastewater treatment plants and will produce reclaimed water at the future Carnation Treatment Plant and Brightwater Treatment Plant. Reclaimed water can be used for many purposes, such as irrigation and industrial uses, which currently utilize potable water sources. In addition, the production and use of reclaimed water can help offset the potential impacts of climate change on summer stream flows and water supplies. King County will continue to encourage and explore additional opportunities to increase the use of reclaimed water in accordance with Chapter 90.46 RCW, the Regional Wastewater Services Plan, ((~~the county's Climate Plan))~~ and Executive Orders to Reduce Global Warming,

Reclaimed water produced by King County must be consistent with the state's Water Reclamation and Reuse Standards as promulgated under chapter 90.46 RCW. This document describes differing levels of treatment that are required to produce different classes of reclaimed water. King County currently produces only Class A reclaimed water, which is produced using the highest levels of treatment.

1. Potable Water Systems

Potable water is provided by Group A public water systems having 15 or more connections, Group B public water systems having 2 to 14 connections, and individual private wells serving one connection. Exempt wells refer to wells that do not require obtaining a water right permit from the state for withdrawal of water. These exempt wells are subject to all other rules and regulations other than the requirement to get a permit from the state to withdraw water. Water withdrawn from an exempt well for individual or group domestic water supply cannot exceed 5,000 gallons per day, nor may the water be used to irrigate more than a half acre of lawn or noncommercial garden. The type of water system required for new development will depend upon whether a proposed development is or is not located within the Urban Growth Area, is or is not within an approved service area of an existing public water system, and is or is not able to provide an adequate water supply as required under RCW 19.27.097 and/or RCW 58.17.110.

F-225 Group A water systems shall be responsible for fulfilling their duty to provide timely and reasonable service within their approved service areas as required by state law and the King County Comprehensive Plan and development regulations. Approved service areas include future service areas approved under the Public Water System Coordination Act (chapter 70.116 RCW) and retail service areas approved under

RCW 43.20.260. The service areas for Group A public water systems are defined by Coordinated Water System Plans approved under chapter 70.116 RCW and King County Code 13.28, and by individual water system plans reviewed and approved by the county under King County Code 13.24, and approved by the state under RCW 43.20. Water utilities required to submit water system plans to the county for review and approval under King County Code 13.24 shall describe in their plans how they intend to provide timely and reasonable service within their service areas. The description in the plan should include a description of when the utility will provide an initial response to a potential customer on the availability of water from the utility, and the terms and conditions under which it will be supplied, and shall include the utility's plan to provide timely and reasonable service throughout its approved service area. The ((~~Utilities Technical Review Committee (~~))UTRC((~~)~~)) shall be responsible for ensuring that water system plans include this information. The UTRC shall also be responsible for addressing any inconsistencies between the County's review and approval process for WSP's and the processes of the state Department of Health.

F-226 **Water service delivery within the Urban Growth Area shall meet the requirements of King County Code Section 21A.28.040, and be addressed in capital facility and infrastructure portions of water system plans, as provided for in Policy F-208. In the Urban Growth Area all new construction and all new subdivisions shall be served by an existing Group A public water systems except in the circumstance when no Group A public water system can provide service in a timely and reasonable manner per RCW 70.116.060 or when no existing system is willing and able to provide safe and reliable potable water with reasonable economy and efficiency per RCW 19.27.097.**

F-227 **In the Urban Growth Area, individual private wells are not permitted unless application of Policy F-226 to a proposal for a single-family residence on an individual lot would deny all reasonable use of the property. In that case, the well would be allowed only as an interim facility until service by a public water system can be provided. The individual well must meet the criteria of the King County Board of Health Title 13.**

F-228 **In the Urban Growth Area, if an existing Group A water provider cannot provide direct service to new development in a timely and reasonable manner as required**

under RCW 70.116.060 or chapter 43.20 RCW, a new public water system may be established if it is owned and operated by the following, in order of preference:

a. By the Group A system, in whose service area the system is located, via satellite management, or

b. By a satellite management agency approved by the State Department of Health under contract with the Group A system in whose service area the system is located, provided that the existing Group A water system remains responsible for meeting the duty to serve the new system under RCW 43.20.260.

All new public water systems formed in the UGA shall connect to the Group A water system in whose service area the new system is located when direct service becomes available. ((~~Any well that is abandoned in the process of connecting to a Group A water system shall be decommissioned in conformance with applicable state law.~~)) All known and projected costs for anticipated connection shall be funded at the permitting stage of any proposed new construction or new subdivisions.

F-229 **In the Rural Area, King County land use and water service decisions shall be guided generally by the principle of maintaining the long-term integrity of Rural Area ecosystems, consistent with Countywide Planning Policy LU-15. Within the Rural Area, individual private wells, Group B water systems, and Group A water systems are all allowed; however, water service shall first be obtained when available from an existing Group A system, or, if such service is not available, then from an existing Group B system, before creation of a new system or use of private wells is allowed. Water service delivery within the Rural Area shall meet the requirements of King County Code Section 21A.28.040, and if provided by a water system,((~~be addressed in capital facility and infrastructure portions of water system plans, as provided for in~~)) the system's capital facilities plan shall be consistent with Policy F-208. Creation of a new public water system or the expansion of an existing Group B system may be allowed to serve new construction or new subdivisions when no Group A public water system can provide service in a timely and reasonable manner ((~~per~~)) pursuant to RCW 70.116.060, or when an existing system is not willing and able to provide safe and reliable potable water with reasonable economy and efficiency ((~~per~~)) pursuant to RCW 19.27.097. ((~~The provision of water service within Rural Areas shall be guided by the principle of maintaining the long-term integrity of Rural Area ecosystems, consistent with Countywide Planning Policy LU-15.~~))**

F-230 New public water systems established in the Rural Area shall be owned and operated by the following, in order of preference:

a. By the Group A public water system in whose service area the system is located, by direct service or satellite management by the Group A system,

b. By a satellite management agency approved by the State Department of Health and providing service within the county and under contract with the Group A system if it is located in a Group A system service area; or

c. By the owners of the lots, which are provided water by a new Group A or Group B system if not within the service area of an existing Group A system or not within the area covered by a satellite management agency. Approval for any such system shall be conditioned for future ownership or management by a satellite management agency, when such service becomes available, and for periodic review of system operations, as required by RCW 70.119A.060(2).

Ecology has determined that the rivers and streams in the major river basins in King County have no water available for further consumptive appropriation without harmfully impacting instream values. For that reason, it has by regulation closed those basins to issuance of new water rights, and has directed that the natural interrelationships between surface and ground waters should be considered in future water allocation decisions in order to avoid adverse impacts to instream flows. The installation and use of wells that are exempt from ecology's water rights permitting process may further harm those rivers and streams when the wells are withdrawing groundwater that is directly connected to the water in the stream. The installation of new exempt wells may also create health and safety problems by interfering with the water supplied by existing wells, and by creating more holes in the ground that can lead to contamination of entire aquifers. Under K.C.C. chapter 9.14, the Department of Natural Resources and Parks is to act as lead agency in coordinating the activities of DDES and Public Health in order to ensure that groundwater quality and quantity are protected, and facilitate implementation of the plans that have been developed to protect groundwater in five groundwater management areas within King County.

F-231 New subdivisions with more than six single-family lots on Vashon-Maury Island and in basins with closed streams in the Rural Area (as defined in WAC 173-507,508, 509, 510, and 515) may not be served by a potable water system using an exempt well, or a combination of multiple exempt wells. Exempt wells are allowed only in the Rural Area and only under the following circumstances:

a. New subdivisions or short subdivisions with six or fewer lots;

b. Except as otherwise provided in subsection c. of this policy only one exempt well per subdivision or short subdivision will be permitted unless more than one

exempt well is needed to meet the water flow requirements for the subdivision or short subdivision;

c. Individual private wells may be used in a subdivision or short subdivision when all lots in the subdivision or short subdivision are twenty acres in area or larger; and

d. New developments in the Rural Area served by one or more exempt wells shall not exceed one-half acre of irrigation.

F-232 **King County <u>has an obligation to protect groundwater quality and quantity in rural areas; supports uses of groundwater that meet public health, resource protection, land use, planning, and fish recovery objectives and obligations; and supports tracking and measuring of groundwater use as it relates to the County's interests and responsibilities. King County</u> shall work with <u>water service providers,</u> the State Department of Ecology and the State Department of Health to ensure that ((~~existing~~)) <u>such</u> provisions of state law ((~~that provide for measuring water withdrawals or diversions for sources of supply~~)) are fully utilized to meet ((~~public health, resource protection, land use, planning and fish recovery~~)) <u>these</u> objectives and obligations. <u>The discussions with the water service providers and state agencies shall include the need for state or local procedures or additional authority to address (a) the construction of new exempt wells within existing water utility service areas, (b) decommissioning of wells no longer in service, and (c) other issues identified by the participants. King County shall require</u> ((~~A~~)) <u>a</u>ny new or expanding Group B water system ((~~shall~~)) to have a totalizing source meter and ((~~shall~~)) make information from the meter available upon request of King County.**

2. Regional Water Supply Planning

Over the past several years King County has been working cooperatively with many of the larger water utilities in the region to gather information about regional water demand and supply. As a result of potential impacts from climate change on water demand and supply, this effort will become increasing important in future years. King County would like to use this information to help develop a regional water supply plan.

F-233 **King County supports ((~~development~~)) <u>initiation of a water planning process for the development</u> of a regional water ((~~supply~~)) plan ((~~for the entire region~~)). <u>The planning process should at a minimum cover all of King County, but may include a</u>**

broader geographic area. The County will work in concert with water utilities and others that participate. Key components of this planning process should include:

a. Involvement, oversight and support of elected officials in the region;

b. Meaningful public participation including the involvement of the state and tribes; and

c. ((~~Prioritization of future supplies, including a role for conservation and reclaimed water,~~)) Recognition of, and making appropriate linkages with, other state, regional, or local planning processes((~~, and recognition of the impacts of climate change on future supplies~~)).

~~d. Assigned accountability for implementing conservation and developing new supplies and infrastructure such as transmission pipelines; and~~

~~e. Legislative changes, if necessary, to implement the plan.~~))

F-234 King County ((~~should assure that a regional water supply plan for all of King County is prepared in cooperation with water utilities and in coordination with affected federally recognized tribal, local and state governments. A continuous and meaningful public process should be used to develop the regional water supply plan, resulting in a plan that is adopted by elected public officials in the region and used by the state in making water resource decisions. The regional water supply plan should implement and be~~)) recognizes that a regional water planning process will be a collaborative process. King County's objectives for the process and a resulting plan are that it:

a. Be consistent with, and support, growth management objectives and decisions made by local and regional jurisdictions under the Growth Management Act ((~~and~~));

b. Address the need for sufficient flows to achieve salmon recovery objectives of the approved regional recovery plan for species listed under the Endangered Species Act, and recognize tribal water rights;

c. Be consistent with and support the approved water quality and quantity strategies adopted by the region, local governments, and other responsible entities (such as water utilities) in compliance with federal requirements under the ((~~Endangered Species Act,~~)) Clean Water Act, Safe Drinking Water Act, and other authorities relevant to water quantity and quality((~~, and consider the impacts of climate change on water demand and supply.~~));

d. Include provisions for the efficient use of water, including reclaimed water;

e. Consider the impacts of climate change on water demand and supply;

f. Address the water needs of other specific sectors of the local economy, including agriculture and other industries with significant water uses;

g. Include, to the extent possible, assigned accountability for implementing conservation and developing new supplies and related infrastructure; and

h. Identify, and develop a strategy for, any legislative changes necessary or desirable to implement the plan.

F-235 ((~~The county will work with water utilities, tribal governments, and other stakeholders to develop a water supply plan that prioritizes an array of potential sources, including conservation and reclaimed water, and defines a publicly- and state-accepted strategy for how the region could best meet future demands for water. During development of the regional water supply plan, the county will work in concert with water utilities to evaluate the projected water demands for population growth and other out of stream needs identified under the Growth Management Act, Endangered Species Act response provisions in plans developed under the state's Salmon Recovery Act, and Clean Water Act requirements for water quality. The evaluation of demands, and development of a plan, should address the water needs and supply options to support a viable agricultural industry within King County, and shall include the needs for other non-potable uses of water that may be supplied by reclaimed water. The county should use the information and products generated by the planning process to assist in the management of its reclaimed water system and water resources, and in its water supply planning activities, which include developing and implementing policies and approaches to water management and supply issues within King County's authority or within collaborative processes with other parties.~~)) King County shall participate in the development of a regional water supply plan or plans addressing potable water supply service by multiple water purveyors to ensure that uses of reclaimed water intended to augment or replace potable water supplies will be considered in the development of any such plans, and for such other purposes as are authorized in the underlying authority for such a plan. King County's participation in the development of such plans shall be carried out in accordance with RCW 90.46.120, and pursuant to processes provided in the underlying planning authority.

3. Utility System Interties

Water utilities obtain water supplies from many varying sources. Some water utilities receive the vast majority of their water supply from wells. Others receive substantial portions from municipal watersheds

and reservoirs. The varying water supply sources can differ substantially in terms of dependability of output, so that while one water utility may have excess capacity, a neighboring water utility could be experiencing severe shortages and be unable to adequately serve their customers.

F-236 **King County supports interties that allow the transfer of water resources among water utilities ((~~in urban areas~~)) to meet the projected demands for growth. The transfer of water must be consistent with state law in RCW 90.03.383, locally adopted comprehensive plans, regional water supply plans, groundwater plans, watershed plans, and approved Coordinated Water System Plans, and implement approved Endangered Species Act response requirements and Clean Water Act requirements.**

F-237 **King County supports the development of appropriate regional water intertie capital projects, subject to approval from appropriate local, state, and federal agencies and consistent with Policy F-236.**

4. Water Use Efficiency, Planning, and Management

Water is becoming an increasingly scarce resource, which calls for commitments to improved planning, more efficient water use, and better water management. The impacts of climate change on water demand and supply adds to the need to make efficient use of this scarce resource. As part of its resource management and land use planning responsibilities, the King County Utilities Technical Review Committee reviews water utility plans for those water utilities serving unincorporated King County or otherwise subject to the planning requirements of K.C.C. 13.24 and ensures the inclusion of elements related to reclaimed water, water use efficiency, and water conservation in the plans as may be called for under state law, the King County Code, or the King County Comprehensive Plan. The Reclaimed Water Act of Washington State (RCW 90.46) recognizes the value of reclaimed water in the process to better manage, protect, and conserve our water resources. In addition, measures to increase water conservation and expand the use of reclaimed water for non-potable uses throughout the county are important elements in preparing for potential climate change impacts, and to address water as a recognized limiting factor for Puget Sound and salmon recovery efforts. The King County Code also directs county programs to act as a clearinghouse for data related to groundwater quality and quantity in order to facilitate implementation by King County and others of the groundwater management plans that have been developed for major portions of King County.

~~**F-238** **King County shall participate in the development of a regional water supply plan or plans addressing potable water supply service by multiple water purveyors to ensure that uses of reclaimed water intended to augment or replace potable water supplies**~~

~~will be considered in the development of any such plans, and for such other purposes as are authorized in the underlying authority for such a plan. King County's participation in the development of such plans shall be carried out in accordance with RCW 90.46.120, and pursuant to processes provided in the underlying planning authority.~~

F-((~~239~~))238 King County shall partner with utilities to publicize water conservation and encourage best management practices that conserve potable water supply through measures that include use of alternative supplies such as reclaimed water. In exercising its role in reviewing utility water system plans, ((~~King County Utilities Technical Review Committee (~~))the UTRC((~~)~~)) shall ensure water system plans include an evaluation of reclaimed water opportunities and encourage water purveyors to include aggressive conservation and reuse measures where applicable, as well as development of new sources to support planned land uses with reliable service at a reasonable cost. Potential uses of reclaimed water shall focus on existing and proposed source supplies for large water users, such as golf courses, cemeteries, and parks; uses that could result in reducing direct withdrawals from streams and groundwater; uses that could enhance wetlands; and uses to help meet the water needs of agriculture. The provisions for the use of reclaimed water in any plan approved by the county should be included by the county in its review of provisions for water supplies for any proposed new land subdivision or short subdivision, as required under RCW 58.17, where the proposed subdivision or short subdivision is within the service area covered by the water system plan.

F-((~~240~~))239 In its review of water system plans, the ((~~King County Utilities Technical Review Committee (~~))UTRC((~~)~~)) shall consider the criteria provided in K.C.C. 13.24.010, .060, and .070, and determine the plan's consistency with the following:

a. The King County Comprehensive Plan, land use plans, and development regulations adopted under the Growth Management Act;

b. Approved or adopted regional water resource plans, including basin plans, groundwater plans, watershed-based conservation and recovery plans developed under ESA, salmon recovery plans developed under chapter 77.85 RCW, water resource plans developed under chapter 90.54 RCW, watershed plans developed under chapter 90.82 RCW, and a regional water supply plan or water resource management plan;

c. State policies promoting the use of reclaimed water, including evaluation of reclaimed water opportunities as required by Chapter 90.46 RCW;

d. The county's Regional Wastewater Services Plan;

e. Other countywide plans managed by King County, such as the King County flood hazard management plan (as provided in Countywide Planning Policy CA-12) and the King County emergency management plan; and

f. Other relevant county, regional or statewide plans, initiatives, or strategies, such as those to address climate change impacts on water resources, and for restoring Puget Sound.

The UTRC shall work with state agencies, water utilities, and other parties to develop any necessary rules, policies or checklists to provide clear information and guidance as to the county's expectations for its reviews. For each plan submitted to the county for review, the UTRC should have the goal of providing an initial response and comments to the water utility within the same timeframes as the state Department of Health under RCW 43.20.250.

F-((~~241~~))240 In reviewing proposals for modified and expanded service area boundaries for municipal water suppliers, the ((~~Utilities Technical Review Committee (~~))UTRC((~~)~~)) shall consider, in addition to Policy F-240:

a. Compliance by the water system with its water system comprehensive plan, including water conservation elements;

b. Whether it can meet its duty to provide timely and reasonable service within its service area, as required under chapter 43.20 RCW; and

c. Consistency with the service provisions of any applicable Coordinated Water System Plan, as adopted in King County Code chapter 13.28.

The county shall not approve a water system plan with a proposed service area where the water system is unable to provide timely and reasonable service for one or more of the reasons identified in RCW 43.20.260. Timely and reasonable service by a water utility within its service area includes the provision of satellite or remote ownership or management of facilities that are not physically connected with the water utility's other facilities. This does not preclude a modified or expanded service area boundary for the water system in order to correct problems and provide reliable potable water service within the proposed modified service area. The UTRC is responsible for making determinations of timely and reasonable service, as provided for under RCW 70.116, and K.C.C. 13.24 and 13.28.

F-((~~242~~))241 Consistent with Countywide Planning Policies CO-3, CA-6, CA-9, and FW-5, the ((~~Utilities Technical Review Committee (~~))UTRC((~~)~~)) should develop a water accounting program in conjunction with affected water utilities. The water

accounting program should coordinate information on the rate, timing, and location of new development with the projected ability of water utilities to issue certificates of water availability. The UTRC, in conjunction with Department of Development and Environmental Services, should ensure that the certificate of water availability contains the information necessary to meet the requirements of K.C.C. 13.24.120 and 21A.28.040, and the King County Comprehensive Plan.

5. Resource Management and Protection

Water system reservoirs and watersheds often serve a number of functions. These functions can include open space, recreation, forestry, and resource management. However, each function must be weighed against the primary purpose of such reservoirs and watershed, which is to provide and protect supplies of potable drinking water.

F-((~~243~~))242 <u>Consistent with Countywide Planning Policy FW-5,</u> ((~~P~~))<u>p</u>ublic drinking water system <u>surface water</u> reservoirs and their watersheds should be managed primarily for the protection of drinking water, but should allow for multiple uses, including recreation, when such uses do not jeopardize drinking water quality standards. ((~~State law (RCW 90.54.020(4) and (6)) prefers multipurpose storage reservoirs over single-purpose structures. Consistent with Countywide Planning Policy FW-5, Puget Sound, floodplains, rivers, streams, and other water resources shall be managed for multiple beneficial uses including flood and erosion hazard reduction, fish and wildlife habitat, agriculture, open space, water supply, and hydropower. Use of water resources for one purpose shall, to the fullest extent possible, preserve and promote opportunities for other uses.~~)) Public watersheds must be managed to protect downstream fish and agriculture resources.

F-((~~244~~))<u>243</u> Groundwater-based public water supplies should be protected by preventing land uses that may adversely affect groundwater quality or quantity to the extent that the supply might be jeopardized. Consistent with Countywide Planning Policies CA-5 and CA-6, the county shall ensure that it protects the quality and quantity of groundwater used as water supplies by such actions as implementation of groundwater management plans, development of best management practices within aquifer recharge areas, and developing plans for replacement of depleted or degraded aquifers.

I. Public Sewers and On-Site Wastewater Treatment and Disposal Systems

King County adopted the Regional Wastewater Service Plan (RWSP) in 1999. The RWSP outlines a number of important projects, programs, and policies for King County to implement through 2030 to continue to protect public health and water quality and ensure sufficient wastewater capacity to meet future growth needs. The RWSP includes building a new regional treatment plant by 2010, now known as "Brightwater", to accommodate growth in the northern portion of the wastewater service area. The Brightwater Treatment System will include a 36 million gallons per day (mgd) treatment plant located at the Route 9 site in unincorporated Snohomish County; conveyance (pipes and pumps that take the wastewater to and from the plant); and a marine outfall that will discharge effluent (treated wastewater) from the Brightwater Treatment Plant into Puget Sound. The Brightwater conveyance system consists of approximately 14 miles of conveyance pipeline built in underground tunnels. Reclaimed water pipes are also being built in these tunnels and will bring reclaimed water closer to irrigators and industries in north King County, south Snohomish County, and the Sammamish Valley. Construction on the Brightwater Treatment System began in 2006; the project remains on schedule for completion in 2010.

The RWSP also calls for improvements to the county's regional conveyance system to meet the 20-year peak storm design standard and accommodate increased wastewater flows; improvements to reduce existing and future levels of infiltration and inflow into local collection systems; and improvements to control combined sewer overflows (CSOs) so that an average of no more than one untreated discharge occurs per year at each CSO site by 2030. The adopted policies that guide the implementation of the RWSP are in King County Code 28.86.010 through 28.86.180.

King County is pursuing the development of a Reclaimed Water Comprehensive Plan as an element of the RWSP. The overall goals of the Reclaimed Water Comprehensive Plan (Plan) are to identify ways to better manage and use treated effluent from King County's regional wastewater treatment system, and reduce the amount of effluent discharged to Puget Sound. The Plan will consider potential uses of reclaimed water authorized under state law and will guide King County's future reclaimed water program. King County's existing reclaimed water program will continue while the Plan is being developed. Facilities, decisions, and agreements supporting the county's existing reclaimed water program are guided by and implemented in accordance with existing policies in the RWSP.

In addition to King County's role as the regional wastewater treatment provider, the Seattle-King County Department of Public Health is the agency responsible for permitting on-site wastewater treatment and disposal systems (septic systems). In addition, the UTRC and the King County Council review and approve sewer utility comprehensive plans.

F-((~~245~~))244 In the Urban Growth Area, all new development shall be served by Public sewers unless:

a. Application of this policy to a proposal for a single- family residence on an individual lot would deny all reasonable use of the property; or

b. ~~Sewer service is not available for a proposed short subdivision of urban property that is adjacent to the Urban Growth Area boundary in a timely or reasonable manner as determined by the Utility Technical Review Committee. These on-site systems shall be managed by the sewer utility whose service area encompasses the proposed short subdivision or the provider most likely to serve the area and shall meet all state and county approval requirements. The approved short subdivision shall indicate how additional lots to satisfy the minimum density requirements of the zoning will be located on the subject property in case sewers become available in the future. There shall be no further subdivision of lots created under this policy unless served by public sewers.~~)) Sewer service is not available for a proposed short subdivision of urban property in a timely or reasonable manner as determined by the Utility Technical Review Committee. These on-site systems shall be managed by one of the following entities, in order of preference:

1. The sewer utility whose service area encompasses the proposed short subdivision; or

2. The provider most likely to serve the area; or;

3. an Onsite Sewage System Maintainer certified by the Seattle-King County Department of Health.

The onsite system shall meet all state and county approval requirements. The approved short subdivision shall indicate how additional lots to satisfy the minimum density requirements of the zoning will be located on the subject property in case sewers become available in the future. There shall be no further subdivision of lots created under this policy unless served by public sewers.

F-((~~246~~))245 In the Urban Growth Area, King County and sewer utilities should jointly prioritize the replacement of on-site systems that serve existing development with public sewers, based on the risk of potential failure. King County and sewer utilities should analyze public funding options for such conversion and should prepare conversion plans that will enable quick and cost-effective local response to health and pollution problems that may occur when many on-site systems fail in an area.

F-((~~247~~))246 City-owned parks that are redesignated from Rural to Urban to allow future annexation by a city and that are subsequently served by public sewers shall be tightlined. This policy applies to parks that were redesignated from Rural to Urban on or after September 20, 2004.

F-((~~248~~))247 The existing public sewer system in the Town of Vashon cannot be expanded to serve land beyond the boundaries of the town, except as provided in Policy F-((~~249~~)) 248 and as consistent with Title 57 RCW. On-site systems, community on-site systems or decentralized treatment systems may be used as appropriate for planned growth in other Rural Towns.

F-((~~249~~))248 Public sewer expansions shall not occur in the Rural Area or on Resource Lands, except where needed to address specific health and safety problems threatening the existing uses of structures or the needs of public schools or public school facilities. Public sewers may be extended, pursuant to this policy, only if they are tightlined and only after a finding is made by King County that no reasonable alternative technologies are technologically or economically feasible. Utility providers shall ensure, through a signed agreement between the school district and the utility provider, that any sewer service permitted for the school district is designed only to serve public schools or public school facilities. Public sewers which are allowed in the Rural Area or on Resource Lands pursuant to this policy shall not be used to convert Rural Area land or Resource Lands to urban uses and densities or to expand permitted nonresidential uses.

F-((~~250~~))249 Sewer facilities such as pump stations, force mains and trunk lines that do not provide connections to the Rural Area may be located in the Rural Area only when they are identified in a King County-approved comprehensive sewage system plan and upon a finding by King County that it is technically necessary in providing service to the Urban Growth Area.

F-((~~251~~))250 On-site wastewater treatment systems in the Rural Area and Resource Lands should be designed, built and operated as permanent methods of sewage disposal.

F-((~~252~~))251 King County should monitor on-site systems that have shown evidence of failure or potential for failure. The data should be used to correct existing problems and prevent future problems. King County should analyze public funding options for correcting on-site wastewater system failures which may include, where feasible and

otherwise consistent with this plan, conversion to community sewage systems or installation of public sewers.

F-((~~253~~))252 Collective on-site systems may be used only in the following circumstances in the Rural Area and Resource Lands:

a. Existing on-site systems are failing within an area and the Seattle/King County Department of Public Health concurs that long-term individual on-site system repairs are not feasible and/or water quality is threatened by the presence of or potential for health hazards resulting from inadequate on-site wastewater disposal methods;

b. An authorized public agency will manage the community system; and

c. The community system is designed only to serve existing structures and lots and cannot be used as a basis to increase density or to expand permitted nonresidential uses. Substandard vacant lots must be combined to the extent feasible to meet rural density policies. Management of the community system must be by an authorized public agency.

Greywater is residential wastewater generated from bathtubs, showers, bathroom sinks, washing machines, dishwashers, and kitchen sinks. It includes sewage from any source in a residence or structure that has not come into contact with toilet wastes. Greywater comprises 50-80% of residential wastewater.

F-253 King County supports innovative technologies to process greywater for safe use on-site in the Agriculture and Rural Zones.

J. Solid Waste

Appropriate management of solid waste to protect the environment of King County is essential to public health. Responsibility for management of solid wastes generated by unincorporated area residents and businesses is shared by waste haulers certified by the Washington Utilities and Transportation Commission and the King County Solid Waste Division.

F-254 Solid waste should be handled and disposed of in environmentally sound ways that protect the quality of air, water and public health.

F-255 **King County shall divert as much material as possible from disposal to reduce the overall costs of solid waste management to county residents and businesses, conserve resources, protect the environment, and strengthen the county's economy.**

F-256 **Solid waste management should be planned and disposal capacity provided on a regional basis.**

F-257 **Solid waste handling facilities should be dispersed throughout the county in an equitable manner.**

K. Surface Water Management

Surface water management activities address both the quantity and quality of water entering the natural environment. Urban areas are largely covered with impervious surfaces (e.g., buildings, streets, parking lots) that cause increased runoff and are a source of pollutants. Management in the Rural Area is important, too, because of the potential adverse impacts of land clearing and impervious surface as well as forestry, agricultural, and livestock practices. Prevention or mitigation of flooding, erosion, sedimentation, and water quality and habitat degradation is important for both the built and natural environments. King County has been and will continue to be a leader in developing and implementing state-of-the-art stormwater management techniques including low impact development (LID). LID is becoming increasingly important in meeting the challenge of protecting declining and federally protected aquatic species, meeting the requirements of the Municipal National Pollution Discharge Elimination System Permit, mitigating climate change, and in doing our part to protect and restore Puget Sound.

The primary LID tools to be used in the Rural Area are forest retention and limiting impervious surface. King County shall continue to help limit impervious surface through code and incentive programs that help keep land in forest and agricultural use.

F-258 **To reduce flooding, erosion and sedimentation, prevent and mitigate habitat loss, enhance groundwater recharge and prevent water quality degradation, the surface waters of King County shall be managed through plans, programs and regulations developed by King County in cooperation with affected jurisdictions whenever possible.**

F-259 **A watershed approach shall be taken to surface water management, with responsibility shared among King County and affected jurisdictions. This approach should emphasize prevention of water quality degradation through education**

programs and implementation of best management practices to reduce pollution entering surface waters, including Puget Sound.

F-260 **In the Rural Area, King County shall minimize the use of constructed facilities for surface water management and maximize the use of natural systems, provided that the ecological functions of the natural systems are not harmed. The county should provide incentives to keep these natural systems intact. Natural systems are also preferred in the Urban Growth Area, but it is recognized that structural systems will be needed to realize urban growth and density goals. King County will plan and manage surface waters on a watershed basis pursuant to Policies E-123 through E-129. To accomplish this goal, water should not be diverted from one watershed into another, nor from one drainage basin into another, unless no other reasonable alternative is available for managing surface water run-off within the same watershed and drainage basin. Where such diversions are permitted, King County will require such environmental analysis and mitigation as is needed to protect surface water resources from significant adverse impacts.**

F-261 **In the Urban Growth Area, regional and shared surface water management facilities should be encouraged to support infill development to preclude the need for individual on-site facilities, provide development incentives, encourage efficient use of land, and reduce overall facility maintenance costs. These facilities should be planned and financed through public and private partnerships.**

F-262 **Regional and shared stormwater facilities should be funded through an adequate and equitable funding mechanism. Stormwater facilities required of new development should be designed and built for low-cost, long-term maintenance.**

F-((~~262a~~))263 King County shall continue to encourage, support and require the use of low impact development as a part of its strategy to mitigate stormwater impacts from new development to the maximum extent practicable, as discussed in policies ((~~U-607, U-608, U-609~~)) U-305, U-306, U-307 and ((~~R-233~~)) R-337.

F-((~~263~~))264 King County should work cooperatively with other jurisdictions to develop and implement plans and programs that address the proper treatment and/or disposal of the wastes generated from maintenance of stormwater facilities.

F-((~~264~~))265 King County shall work with jurisdictions to ensure that storm and surface water management facilities are transferred from King County to the local jurisdiction that annexes or incorporates that portion of King County.

L. Floodplain Management

Both the Washington State Growth Management Act (chapter 36.70A RCW) and Title 86 RCW, Flood Control require interlocal coordination for effective flood hazard management. Counties have been directed to prepare comprehensive flood hazard management plans with participation of the cities. The King County Flood Hazard Management Plan is binding on all jurisdictions within the county. Flooding is a countywide issue impacting public safety, regional economic centers, Agricultural Production Districts, transportation corridors, and public and private properties. As such, King County is a regional service provider for floodplain management.

F-((~~265~~))266 King County shall participate with cities to prepare, update and implement comprehensive flood hazard management plans that meet or exceed standards established by the National Flood Insurance Program.

F-((~~266~~))267 King County shall maintain a regional flood warning program in King County.

F-((~~267~~))268 Maintenance of flood protection facilities in King County shall reflect a prioritized approach, based upon the Flood Hazard Management Plan policies, within available funding levels. Additional funding sources and partnerships in support of maintaining and improving flood protection facilities should be sought whenever possible.

The King County Council has adopted the 2006 Flood Hazard Management Plan, which identifies flood risk reduction strategies to address the backlog of maintenance and repairs to existing levees and revetments, acquire or otherwise mitigate repetitive loss properties and other at-risk floodplain properties, setback or remove levees to increase flood storage and conveyance, conduct floodplain mapping and improve countywide flood warning and flood response. The county will work cooperatively with the King County Flood Control Zone District, cities, and other stakeholders to implement the 2006 Flood Plan.

F-((~~268~~))269 Responsibility for the costs of flood hazard management, including, but not limited to capital improvements, repair, operation and maintenance, and flood warning, should be shared between King County, the King County Flood Control Zone District, and incorporated cities.

M. Human Services

People are King County's most valuable resource. Their well-being affects the prosperity of the region. King County's vision for the future includes livable, safe communities that are attractive to families, thriving cities, healthy rural communities and a robust economy. The availability of human services is an essential component of this vision.

Regardless of age, cultural background, income or family size, *everyone* is likely to need human services at some point. Human services range from youth recreation programs to mental illness programs to social programs for senior citizens. Many needs associated with human services are circumstantial and have nothing to do with income. Any one can have trouble locating quality childcare. Any one may need help dealing with family violence or substance abuse problems. Naturally, people with low incomes have the highest needs for human services, including help in meeting such basic needs as food, housing, health care and job training.

King County helps address the human service needs of its residents in many ways, including financial assistance for programs that serve residents who lack resources to meet basic needs. Although there are many funding sources, the amount is inadequate to meet rising human service needs. A large portion of King County's resources for human services comes from the State of Washington. This money is mandated to be spent on particular groups, such as people with developmental disabilities, people with mental illness, people with substance abuse problems and veterans. The county also accesses its own current expense fund to support other human services.

The policies in this subpart reflect the intent of the *King County Framework Policies for Human Services* adopted by the King County Council in 2007.

Human Services are important social supports that help advance the well-being of King County's residents and communities. The purpose of the Framework Policies for Human Services is to communicate King County government's role in human services, the goals we seek to achieve, and the principles that will underlie our investments. The King County Framework Policies for Human Services of 2007 supersede the 1999 Framework Policies for Human Services.

F-270 King County has a regional role in human services, working with many partners to help those most in need.

F-271 In carrying out its role in human services, King County government will:

a. Work with other jurisdictions and organizations to define a regional human services system and strengthen financing, access and overall effectiveness of services;

b. Collaborate with other funders to assure coordination in how funds are used, and continue to explore improvements to system design, contracting, data collection and analysis;

c. Retain responsibility for the development and implementation of mandated countywide specialty systems for mental health, drug and alcohol abuse and dependency, veterans, public health, and developmental disabilities services;

d. Define its regional role in other human service systems, including aging, domestic violence, sexual assault, and youth and family services;

e. Assess and measure the health and needs of King County's citizens on an ongoing basis and modify strategies to respond to changing needs, outcomes, and new research; and

f. Review the effectiveness and appropriateness of this policy framework periodically and revise if needed.

F-272 King County's priorities for human service investments will be programs and services that help to stabilize and improve people's lives, and prevent or reduce emergency medical and criminal justice system involvement and costs.

F-273 King County will focus resources and efforts on programs and services that continue to improve individual and community quality of life, improve equity and social justice, counterbalance growth in areas costly to communities and taxpayers, and preserve the resources necessary to collaborate as a true partner in regional human service systems. The following priority investment areas are consistent with other regional plans and initiatives:

a. Effective intervention and prevention strategies;

b. Job readiness and employment to increase self-sufficiency;

c. Prevention and elimination of homelessness; and

d. Services that reduce the growth of emergency medical and criminal justice system involvement and costs.

F-274 King County will apply principles that promote effectiveness, accountability and social justice.

F-275 **King County embraces the following principles in its human service actions and investments:**

a. King County will provide information to the community on its human services planning and evaluation activities, funding processes and criteria, and the results of its investments in a transparent and accountable manner;

b. King County will uphold federal, state and local laws against discrimination; promote culturally competent and relevant service delivery; and work to end disparities in social, health and economic status among people of different racial and ethnic backgrounds;

c. King County will encourage service approaches that promote recovery and support individuals and families to achieve their full potential to live meaningful and productive lives in the community;

d. King County will foster integration of systems of care through increased information sharing across agencies and programs for the purpose of improved service delivery, coordination and outcomes; and

e. Together with its partners, King County will assess and respond to changing human service needs and use data, research, innovation, analysis and evidence-based practices to drive its investments.

III. Energy & Telecommunications

King County's economy and quality of life depend on readily available, inexpensive and clean energy and telecommunications resources. Energy and electronic communications systems provide important public services and their implementation must be coordinated with land use planning. The sustainable development and efficient use of energy resources can ensure their continued availability while minimizing long-term costs and impacts to the individual, society, and the shared environment.

In order to help mitigate global climate impacts resulting from human energy use, King County is planning its energy uses in ways that will reduce the release of greenhouse gases (GHG~~s~~). In 2006, the King County Executive implemented a suite of four Climate Change Initiatives: Land Use, Transportation, Environment, and Renewable Energy. ((~~The Renewable Energy Initiative calls for~~)) In 2006, the King County council adopted initial targets for renewable energy use:

- At least 50 percent of King County's non-transit energy use to come from renewable resources by 2012;
- At least 35 percent of King County's transit energy use to come from efficiencies and renewable sources by 2015; and
- At least 50 percent of King County's transit energy use to come from efficiencies and renewable sources by 2020.

((~~These goals will provide the framework for energy planning in King County facilities for the next 4 years and beyond.~~)) These are the targets the county is committed to achieving considering, cost, available funding, and public benefit.

Various local, state and federal agencies regulate retail energy providers in King County. Gas and electric utility resource and conservation plans are approved by the utilities and other agencies through a public process. The Washington Utilities and Transportation Commission (UTC) reviews and accepts plans of investor-owned electric and gas utilities, and the Seattle City Council approves the plans of Seattle City Light. Electric and gas utilities operate in King County under franchises with the county for use of the public right-of-way. The UTC also defines the costs that investor-owned utilities can recover, approves rates, sets service standards and resolves customer complaints.

Telecommunications services are regulated by several entities, including the Federal Communications Commission and the Washington Utilities and Transportation Commission. King County has some regulatory authority over telecommunications services through franchises and the development approval process.

A. Energy

1. Consistency with Land Use Plans

State law mandates that electric and gas public service companies provide the same level of service on a uniform basis, regardless of location. (RCW 80.28.110). Policies in this chapter encourage the utilities to prioritize capital improvements in a manner consistent with land use ((~~, particularly where such land use increases net countywide societal energy efficiency and/or supports development of renewable energy resources~~)).

((~~Disruption of traffic due to public and private road projects frequently occurs in King County. Policies in this chapter support existing programs to notify utilities of upcoming projects to build, expand, or maintain county roads so utility and road construction can be coordinated.~~

~~Distribution systems for gas, electric and telecommunications installation in new construction now have separate permits. Permit consolidation is desirable as a means to expedite review while protecting the environment. Countywide Planning Policy ED–23 encourages jurisdictions to establish a master utility project.~~))

F-301 Energy providers' resource and facility plans should be consistent with the King County Comprehensive Plan and should provide for a reliable source of energy in the event of natural disaster or other potential threats of disruption to service.

Disruption of traffic due to public and private road projects frequently occurs in King County. Policies in this chapter support existing programs to notify utilities of upcoming projects to build, expand, or maintain county roads so utility and road construction can be coordinated. Distribution systems for gas, electric and telecommunications installation in new construction now have separate permits. Permit consolidation is desirable as a means to expedite review while protecting the environment. Countywide Planning Policy ED–23 encourages jurisdictions to establish a master utility project.

F-302 King County should coordinate public road construction and maintenance projects with utility construction and maintenance.

Appropriate planning, such as increased housing density, transit-oriented development and walk-to-work housing can significantly reduce regional energy use over time. Similarly, land use regulation can support increased availability and use of renewable energy. For example, consideration of solar access in land use codes and building siting can increase the potential for solar energy use. Policies in this chapter encourage such energy-conscious development.

F-((~~302a~~))303 King County should encourage land uses and development that will improve ((~~countywide~~)) energy efficiency, and should support the expansion of renewable energy resources through development regulations, prudent variances and active incentive programs when the benefits of doing so outweigh the costs.

2. Energy Efficiency, Conservation and Alternative Energy Sources

King County Countywide Planning Policy CO-6 states that "aggressive conservation efforts shall be implemented to address the need for adequate supply for electrical energy and water resources, protect natural resources, and achieve improved air quality." King County has a continued commitment to energy efficiency, conservation, use of renewable resources and quality enforcement of the energy code. Recent recognition of climate change and other negative impacts of our energy infrastructure have brought the need to improve the county's energy use patterns and supplies into the forefront of policy discussions. King County's current energy use patterns and energy supplies could be modified and improved to reduce air pollution (including GHG emissions), conserve non-renewable resources important to future generations, and help to limit the growth in energy costs. ((~~Besides their climate impacts, these energy use patters and supplies include inefficient and non-sustainable energy use as a causal factor in other types of pollution; depletion of non-renewable resources important to future generations; and substantial negative economic impacts caused by spiraling energy costs~~. ~~These and other factors motivated the 2006 Renewable Energy Initiative and subsequent development of the county's Energy Plan. Three major goals define the Energy Plan:~~

- ~~King County will be a leader in the use of climate-friendly, renewable energy sources;~~
- ~~King County will maximize the conversion of waste-to-energy; and~~
- ~~King County will become a national model for energy efficiency by achieving a 10 percent improvement in county systems energy efficiency by 2012 (as compared to a baseline of 2006).~~

~~The following policies are intended to help meet the above stated goals.~~))

F-((~~302b~~))304 King County should foster the development and increased use of clean, renewable and alternative fuel and energy technologies. Promising technologies include, but are not limited to: biodiesel, hydrogen, and increased electrification.

F-((~~302c~~))305 King County shall:

a. Continue to increase the use of renewable fuel in, and the efficiency of, county buses and vehicles and shall support testing of plug-in-hybrid electric vehicles where appropriate.

b. Consistent with policy E-202, collaborate with other local governments regionally, nationally and internationally to develop a common approach to accounting for the ((~~greenhouse gas~~)) GHG emissions resulting from the operation of its public transportation system, and for claiming rights to any ((~~greenhouse~~)) GHG reduction attributes associated with its operation.

In support of its environmental, long-term sustainability and energy security goals, King County will provide leadership by shifting to the use of renewable resources. Although renewable energy sources can be more expensive than traditional power sources on a per unit basis, careful choices of technology and expanded economic considerations including "triple bottom line" life-cycle cost analyses (LCA) show that in proper applications the benefits of some renewable energy technologies already exceed their costs. Additionally, subsidies and grants are available for some renewable power systems. For example, solar electric power is already cost effective in limited applications at county facilities that are remote or very small, where a utility electric service would be more expensive. This may include lighting for bus shelters, parks and ride lots, county road signs and remote monitoring equipment.

F-((~~302d~~))306 King County shall maximize practical applications of electricity and heat production from renewable resources.

F-((~~302e~~))307 King County shall support the conversion of renewable resources ((~~convert~~)) to energy ((~~100 percent of all~~)) for reasonably usable waste products, including methane gas generated from the operation of its landfill and wastewater treatment plants, consistent with ((~~policy E-206~~)) E-205. Renewable resources shall include those sources listed in RCW 19.285.030(18), now and as may be amended. King County shall claim rights to any and all renewable energy and ((~~greenhouse gas~~)) GHG reduction attributes.

King County, working with its utility partners, has a long and successful history of energy efficiency and conservation projects; however these efforts have been largely uncoordinated and piecemeal, subject to the availability of county budget funds and utility incentives. The combination of generally increasing energy costs and climate change mitigation goals will require that the county continuously increase its energy efficiency for many years to come. To achieve energy goals already set and more aggressive goals expected in the future, a coordinated, strategic approach to energy management and investment in energy efficiency is needed in the county. ((~~This is a primary focus of the Energy Plan and the Energy Task Force created to implement the plan.~~))

F-((~~302f~~))308 King County shall develop and adopt strategic energy management, efficiency and conservation programs in its own operations, including:

- **a. Consolidated energy accounting of county facilities to establish baseline energy performance for the county, benchmarking of facilities against comparable best practices where possible, setting goals for facility efficiency improvements, and measuring and reporting progress toward county energy goals;**
- **b. Energy efficiency audits of all significant county facilities and the creation of a prioritized action plan for reducing energy use at such facilities;**
- **c. Energy management plans for energy-intensive or special-purpose county facilities such as wastewater treatment plants, correctional facilities and transit bases that focus on least-cost management and that include specific approaches for each facility's use, as well as the production and sale of energy where appropriate;**
- **d. Mandatory energy efficiency and resource use guidelines for operation and maintenance of all county-occupied facilities, while recognizing the unique operating requirements of specialty facilities;**
- **e. Programs to encourage employees to implement energy conserving measures at work; and**
- **f. Incentives, including retaining a portion of energy cost savings, to county agencies and departments for achieving energy efficiency.**

F-((~~302g~~))309 King County should benchmark all applicable county buildings ((~~using the ENERGY STAR benchmarking tool, and shall apply for LEED Existing Building (LEED EB) and/or ENERGY STAR certification on all qualifying existing county buildings~~)) as a basis for measuring energy efficiency improvements.

F-((~~302h~~))310 King County ((~~shall~~)) should achieve LEED certification on all new county construction.

F-((~~302i~~))311 King County ((~~shall~~)) should purchase only certified energy efficient ((~~ENERGY STAR-labeled~~))appliances and office equipment (((~~or equipment with equivalent or better efficiency~~))) (such as ENERGY-STAR labeled equipment) where available and shall require consideration of energy efficiency in all procurement decisions as an element of determining the lowest price bids.

((~~Many energy efficiency, conservation and renewable energy projects have been deferred or not implemented due to lack of funds, despite their benefits and financial indicators. The value of energy projects are often at a disadvantage because they require capital outlay up-front to reduce operating costs over the project lifetime, and are rejected even though the projects could be effectively self-funding using standard discount rates on capital funds. One problem is that the capital and operating budgets are separate and competing parts of county finance, with laws separating their accounting. In order to meet aggressive climate change mitigation and energy efficiency goals, a commitment to substantial ongoing investment in energy saving projects will be required. Using modern life-cycle cost analyses and other methods, we can develop credible and widely accepted criteria to evaluate energy projects and determine if overall lifetime benefits are greater than their costs. Standardized financing rules and mechanisms (such as 3rd party energy performance contracting or even "energy conservation bonds") for such qualified projects used in the budget process should greatly increase the likelihood of projects being funded.~~))

((~~F-302j King County shall define standardized qualifying and funding mechanisms for energy efficiency and renewable energy projects that support continued aggressive implementation of energy projects.~~))

F-((~~303~~))312 Efficient energy consumption, conservation, the use of renewable technologies, and energy responsible land use decisions should be a priority in King County. King County promotes the maximum use of energy conservation and renewable energy resources now, while leaving options for increasing conservation and renewable technologies in the future.

F-((304))313 To implement the Countywide Planning Policy of aggressive conservation and promotion of regional air quality, King County should:

- **a. Effectively enforce the energy code as part of the general permit process;**
- **b. Provide density incentives through the zoning code for energy-efficient developments;**
- **c. Continue to improve the fuel efficiency and emissions of the county-owned fleet of motor vehicles;**

d. Work with utilities to become a model of energy efficiency in facilities owned or operated by Metropolitan King County; and

e. Seek cost-effective ways to capture energy from county operations which otherwise would be lost, such as methane gas from landfills and sewage treatment.

Methane released from sewage treatment plants and landfills is a potential source of energy. In addition, methane is a potent ((~~greenhouse gas~~)) GHG. As a result, capturing methane from these facilities and putting it to a productive use provides a dual benefit.

F-((~~305~~))<u>314</u> King County shall continue to explore and develop productive uses for and marketing of methane gas from its sewage treatment plants and landfills where appropriate.

The moderate climate of the Puget Sound region provides an opportunity for significant use of solar energy. Relatively low heating and cooling needs in much of the county allow passive and active solar technologies to meet most of our heating and cooling budgets with proper building design. Similarly, our mild climate and available solar energy allows growing some food year round, potentially decreasing the use of fossil fuels for a portion of our citizens' food needs. This opportunity for local investments in passive and active solar design and in local food production can only be realized if building and neighborhood site design provides for solar orientation and through the development of regulations to protect solar access.

Although permit staff attempt to accommodate solar design, current regulations do not typically take into account solar orientation or solar access protection from development on neighboring properties. In addition, regulations, such as building height and building setback allowances, road access requirements, and protections for critical areas, stormwater, and native vegetation, may limit suitable locations for providing solar access. Requirements to create and maintain view corridors may or may not provide solar gain. In order to protect solar access, landowners or developers enter into voluntary solar easements. As an alternative, some municipalities have incorporated measures to protect solar access in their comprehensive plans and development regulations. King County should study these measures and implement best practices in this area in support of the county's larger sustainability goals.

F-((~~306~~))<u>315</u> King County encourages:

<u>a.</u> the use of solar energy<u>;</u> ((~~and should establish programs to encourage~~))

<u>b.</u> the siting of roads, lots, landscaping and buildings for improved solar orientation;

<u>c.</u> the use of passive solar design and active solar technologies; and

d. the protection of solar access.

F-((~~306b~~))316 King County should consider passive and active solar energy collection systems in all new facility designs and major rehabilitations. Solar electric generation systems interconnected with local utilities should be employed where ((~~triple-bottom-line~~)) cost-benefit analysis shows net benefits, considering emergency power potential and capitalizing on utility net-metering and power production credit programs.

Gas and electric utilities offer low-income energy assistance programs. All feasible actions to increase the availability of conservation measures to low-income residents should be pursued, such as public-private cooperation and combining existing rehabilitation efforts with installation of energy efficiency measures.

F-((~~307~~))317 King County should expand the availability of energy efficiency measures to low-income residents.

3. Electric Utilities

The four-state Fifth Northwest Electric Power and Conservation Plan (also called the 5th Power Plan) produced in 2005 by the Northwest Power and Conservation Council (NWPCC) provides a blueprint for the development of electricity resources in the region. Bonneville Power Administration and other federal agencies, the region's utilities, state and local government, private businesses and the people of the Northwest all participate in implementing the council's goals. Electric utilities serving King County include Bonneville Power Administration, Seattle City Light, Snohomish Public Utility District and Tanner Electric Cooperative. Puget Sound Energy provides both electricity and natural gas service.

A number of significant events in the past years have influenced the electric power business in King County's power markets. These include:

1) Ongoing very large expenditures by hydropower utilities (notably BPA) to mitigate salmon habitat losses caused by dams;
2) The failure of Enron in 2001, with its devastating effects on several local utilities and the resultant retrenchment in Washington State from utility deregulation/restructuring;
3) The recognition of human-caused climate change, driven mostly by carbon dioxide release—a significant portion of which can be attributed to electric power generation;
4) The passage of State Initiative 937codified at RCW chapter 19.285, requiring utilities to acquire an increasing portion of their electric supplies from qualified renewable resources (a so-called renewable resource portfolio standard);

5) North American natural gas resource supply limitations and competition for supply, caused in large part by major pipelines being completed from NW Canada to the US Midwest.

Hydropower is the largest single source of our existing electrical power, with the county's major electric resources located outside King County. These include the Grand Coulee, North Bonneville and Ross Dams. No new large dam sites are available in the region, making hydropower a very small part of projected new regional power-generating resources.

Existing hydropower facilities in King County include Snoqualmie Falls, Cedar Falls, Twin Falls, Weeks Falls, and Black Creek. Proposed projects include expansion of Snoqualmie Falls and new facilities at South Fork Tolt River, Hancock Creek and Calligan Creek (both are tributaries of the North Fork Snoqualmie), the Upper South Fork Snoqualmie and Martin Creek near Stevens Pass. Few if any additional projects beyond these listed are expected to be built in King County, and some of those listed above, although licensed, may not be built.

The Federal Energy Regulatory Commission licenses such projects, but in doing so must consider existing plans and policies of public and private jurisdictions. While power generation benefits the public, care must be taken to ensure that small hydroelectric projects are constructed in an environmentally sound manner, directing new, small hydropower facilities, for example, to streams that do not have anadromous fish. Construction and operation must also be consistent with the intended functions and uses of forestlands, where most small hydroelectric projects are located.

The Northwest Power and Conservation Council's (NWPCC) recommended Plan for the next 20 years consists largely of using aggressive conservation as a resource, supplemented with wind power, a small amount of coal, and an even smaller amount of natural gas-fired generation, in combustion turbines. Notably, cogeneration (employed at two King County wastewater treatment facilities) also figures in the mix, albeit contributing a relatively small amount of the region's total energy. No significant addition of hydropower resources is ((~~seen~~)) projected.

Electrical utilities supplying King County are required by Washington State law to plan for their electric power resources in an integrated resource planning process very similar to the process that the NWPCC used for its 5th Power Plan. County suppliers Puget Sound Energy and Seattle City Light have recently finished their Integrated Resource Plans (IRPs) with outcomes similar to those of the NWPCC. Since those IRPs were approved the passage of the I-937 renewable resource portfolio standard has increased the demand (and attendant value of) qualified renewable resources.

F-((~~308~~))318 To address the cumulative effects of multiple energy facilities, King County should continue to participate in the licensing and relicensing processes for all existing and proposed ((~~significant~~)) power generation projects within King County. Individual project reviews should address consistency with designated land uses and environmental protection goals. Specifically, power generation projects should:

- **a. Have climate change impacts considered and mitigated to the greatest extent practical;**
- **b. Be consistent with, and preferably directly incorporated in, utility integrated Resource Plans;**
- **c. Use renewable resources to the greatest extent practical;**
- **d. Include public engagement;**
- **e. Not significantly interfere with commercial forestry operations;**
- **f. Be located and operated in a manner such that impacts to salmonid fish and wildlife are minimized;**
- **g. Avoid unstable and erosion-prone areas;**
- **h. Include performance bonding to fund erosion control;**
- **i. Provide full mitigation for construction and operation impacts;**
- **j. Avoid, to the extent practicable, diminishing scenic values; and**
- **k. Incorporate adequate public safety measures.**

F-((~~309~~))319 King County and the utilities should identify and preserve corridors to accommodate future electric power transmission and distribution lines. Corridor designation should include:

- **a. Identification of appropriate shared uses and recognition of the values provided by nonutility uses, such as recreation;**
- **b. Recognition of county roads as utility corridors; and**
- **c. Evaluation of proposed facility plans on a system-wide basis, rather than project-by-project.**

F-((~~310~~))320 When new, expanded or upgraded transmission is required, use of existing corridors that have above-ground utilities should be evaluated first. King County should facilitate appropriate corridor sharing among different utility types and owners.

F-((~~311~~))321 New electrical distribution lines should be installed underground where reasonably feasible and not a health or safety concern. The county should encourage underground placement of existing distribution lines through such tools as local improvement districts.

Public concern exists over the potential health effects of electrical power lines. The concern focuses on the effects of extremely low level electromagnetic fields, called ELF/EMF or simply EMF. Seattle-King County Department of Public Health currently responds to inquiries from citizens about EMF and keeps abreast of current research. The following policy recognizes the inconclusive nature of the data concerning EMF and the need to have an informed citizenry through public disclosure of available research about the potential health risks. Scientific evidence to-date does not support firm conclusions about the existence of adverse health effects related to EMF.

F-((~~312~~))322 King County will monitor scientific research on potential human health effects of extremely low frequency electric and magnetic fields (EMF). If federal or state agencies promulgate rules to reduce exposure to EMF — through changes in the use of appliances, construction practices, the location of electrical infrastructure or other activities — the county shall inform its citizens and take appropriate actions.

4. Natural Gas

Generally, the most thermally efficient use of natural gas is in "direct applications." For example, to heat homes and businesses, the use of natural gas can reduce the demand for additional electricity. The choice of fuel shall be based on market conditions and the prudently weighted GHG impacts of using natural gas as compared with alternatives, with the customer comparing various fuels. Many homes and businesses in King County do not have the choice of natural gas, however, even within the Urban Growth Area.

Because of this, most multifamily housing is built with electric heat, a significant consideration given that they represent a large share of projected new housing units in urban King County.

King County has by far the largest resource of biologically produced methane in the region, from its wastewater treatment facilities and its solid waste landfills. The county is also developing pilot tests of farm animal waste digesters locally. King County should continue to develop and promote the development of biologically-derived sources of fuel gas and support the efficient marketing and use of such gas.

F-((~~313~~))323 King County should work to remove barriers to the availability and efficient use of natural gas.

F-((~~313a~~))324 King County will provide leadership in and promotion of the use of biologically-sourced methane fuel gas to minimize climate change impacts, including that from its own sources, as a substitute for fossil-sourced natural gas where practical.

5. Hazardous Liquid and Gas Transmission Pipelines

Hazardous liquid and gas transmission pipelines, as defined by RCW 81.88.040 and WAC 480-93-005, consecutively, provide a vital service of transporting hazardous materials from one location to another. Long-distance transmission pipelines move a variety of hazardous materials, including crude oil, petroleum products, natural gas and hazardous liquids, such as anhydrous ammonia. Pipeline rupture or failure can result in release of these materials, which are highly flammable, explosive or toxic. The policies in this chapter identify public values and goals to assure that the transmission of hazardous materials by pipeline address public health and safety.

The Federal Energy Regulatory Commission regulates the location, construction and operational conditions of interstate natural gas pipelines through its certification process. The state and federal government regulate the location, construction and operational conditions of hazardous liquid and intrastate gas pipelines through the Energy Facility Site Evaluation Council (EFSEC). In its review of pipeline applications, however, EFSEC must determine whether the pipelines are consistent with county land use plans and zoning codes. Thus, King County's authority to regulate the location of pipelines is through the comprehensive plan and development regulations.

F-((~~314~~))325 King County recognizes that federal and state regulatory programs govern the design, construction, and operation of hazardous liquid and gas transmission pipelines. To preserve the safety and reliability of the hazardous liquid and gas transmission pipeline system, land use, zoning and regulations shall be consistent with state and federal requirements.

F-((~~315~~))326 Any new hazardous liquid and gas transmission pipelines proposed for construction in King County shall meet the county's development regulations, including but not limited to, King County's zoning code, building code, grading code, and shoreline management code.

King County anticipates that few new hazardous liquid or gas transmission pipelines will be constructed in the near future. However, as existing pipelines age and the relationship between resources, refineries and markets changes over time, new pipelines will need to be constructed. Hazardous liquid and gas transmission pipelines are best constructed away from locations where large numbers of people assemble. King County recognizes however, that under some circumstances, new gas transmission pipelines may need to locate in densely populated areas as the only practical alternative to meet the demand for service.

F-((~~316~~))327 New hazardous liquid and gas transmission pipelines should be located away from high-density residential zones, Urban Activity and Business Centers, Office Parks, sports fields, schools and day care centers or other land uses where large numbers of people would assemble.

F-((~~317~~))328 When new, expanded or upgraded hazardous liquid or gas transmission pipelines are required, use of existing corridors should be evaluated first. King County should facilitate appropriate corridor sharing among different utility types and owners.

F-((~~318~~))329 Hazardous liquid and gas transmission pipelines should not be located in areas susceptible to soil disturbance or liquifaction or in aquifer recharge areas. When it is impractical to avoid such areas, special engineering precautions should be taken to protect public health, safety and welfare.

It is essential to map the location of existing hazardous liquid and gas transmission pipelines within King County so that developers know where they are and whom to call for information before construction begins. Accurate maps will assist King County in reviewing land use applications for land uses located near pipelines.

F-((~~319~~))330 King County should map the location of existing and new hazardous liquid and gas transmission pipelines. Maps shall not substitute the one-call locating system and shall not be used for any construction or maintenance activity.

Risks to life and property can be minimized by keeping land uses a safe distance from hazardous liquid and gas transmission pipelines. Pipelines transport a variety of materials, some of which flow under the force of gravity. While standard setbacks do not assure protection from materials that have the ability to migrate, setbacks may protect life and property from hazardous materials that are highly flammable, explosive or toxic. Limiting the allowable uses within pipeline rights-of-way can further reduce risks to life and property.

F-((~~320~~))331 Structures designed for human occupancy shall not be located within hazardous liquid or gas transmission pipeline rights-of-way and should be set back from the pipeline to protect public health, safety and property. No structures shall be located over the pipeline.

F-((~~321~~))332 Land uses shall be restricted within hazardous liquid and gas transmission pipeline rights-of-way. Passive recreational uses, such as hiking trails, may be allowed if the risk to life and property is assessed and determined to be minimal.

Pipeline failure can result from damage caused by excavation near existing pipelines. Many existing pipelines initially were constructed in less-populated areas with little development. As demand for land grows, the risk of conflict between existing pipelines and land development increases.

F-((~~322~~))333 King County should promote the safety and reliability of the hazardous liquid and natural gas transmission pipeline systems by requiring developers, contractors, and excavators to notify the state, pipeline operators and utilities through the one-number locator service, before beginning excavation or construction.

F-((~~323~~))334 In the interest of safety and reliability of the hazardous liquid and natural gas interstate transmission pipeline systems, the county should take steps to protect and preserve the signs that mark pipelines.

6. Natural Gas Distribution Systems

Natural gas pipelines fall into two major categories: gas transmission lines that transport natural gas from production fields to local distribution companies and distribution systems that deliver natural gas from transmission pipelines to retail customers. The federal government may define certain parts of the natural gas distribution system that serve large volume gas users as part of the transmission system. Distribution systems for transporting natural gas are fundamentally different from transmission gas pipelines and should be regulated based on their design, use and location.

Gas distribution systems are owned and operated by local distribution utilities. Such systems consist of the pipelines that deliver natural gas to end users together with intermediate supply lines. The distribution system is constructed incrementally, with addition of new segments and upgrading of existing lines in numerous small projects. The distribution system is a network that is primarily located in road rights-of-way, where service is available. Local distribution companies are subject to the comprehensive safety regulations administered by the Washington Utilities and Transportation Commission (WUTC) under state law and regulations and by the federal Office of Pipeline Safety under federal law and regulations. The rates and services of investor-owned utilities also are subject to comprehensive regulation by the WUTC under state law and regulations.

F-((~~324~~))335 King County recognizes that the gas distribution system is primarily located in road rights-of-way.

F-((~~325~~))336 King County should promote the safety and reliability of the natural gas distribution pipeline systems by requiring developers, contractors, and excavators to notify the state, pipeline operators and utilities through the one-number locator service, before beginning excavation or construction.

F-((~~326~~))337 In the interest of safety and reliability of the natural gas distribution pipeline systems, the county should take steps to protect and preserve the signs that mark pipelines.

F-((~~327~~))338 Structures designed for human occupancy shall not be located within gas distribution pipeline rights-of-way and should be set back from the pipeline to protect public health, safety and property. No structures shall be located over the pipeline.

F-((~~328~~))339 Permit requirements shall require excavators to ensure adequate protection of any facilities that are encountered during their work. This shall include but not be limited to adhering to the foreign facility owners requirements for separation and backfill, developing joint plans when drilling or boring parallel to foreign facilities, and potholing all facilities that will be crossed by drilling or boring.

B. Telecommunications

1. Telecommunications

Telecommunication technologies are changing rapidly and will continue to change during the horizon of this plan. The future telecommunication system may make little distinction between cable, telephone and cellular. Telecommunication services include voice, data, video and other communication services on various mediums including, but not limited to, wire, fiber optic or radio wave. Effective telecommunications services are critical to citizens in several ways. They promote and enhance individual information exchange, contribute to a robust regional economy, and afford numerous public services, including delivery of emergency services, education and opportunities for citizen involvement.

((~~F-329 King County complies with the Telecommunications Act of 1996 and provides the widespread availability of telecommunication systems to facilitate communication~~

~~between and among members of the public, public institutions and business in both the Urban and Rural areas.))~~

F-((~~330~~))340 Telecommunication services are to be encouraged as a means to mitigate the transportation impact of development and growth, including GHG emissions.

F-((~~331~~))341 King County encourages the telecommunication service providers to engage in ((~~L~~))long-term planning for telecommunications construction, reconstruction and facility upgrades should include provisions to insure that the system's capacity, design and equipment will allow users to take advantage of innovative uses, services and technology.

F-((~~332~~))342 Telecommunication companies and the county should coordinate activities when facilities are being installed or road construction projects are scheduled.

F-((~~333~~))343 Long-term planning for telecommunications systems by the telecommunication service providers should allow uninterrupted service during natural disasters.

F-((~~334~~))344 Colocation of telecommunication facilities is encouraged to reduce the unnecessary proliferation of individual, single-user towers. Colocation shall be required unless an applicant can demonstrate to the satisfaction of the county that colocation on an existing tower is not feasible and not consistent with service quality and access.

F-((~~335~~))345 Although visual impacts are always an important consideration in the decision to approve or deny a proposal, King County shall give greater weight to the visual impacts of telecommunication facilities proposed to be located on residentially-zoned lands or in the Rural Area. In addition, the visual impacts of proposals for an individual tower with a single user shall be given greater weight than proposals to colocate facilities.

F-((~~336~~))346 King County considers the placement of telecommunication facilities within street rights-of-way as the preferred alternative to the construction of facilities on private property. Regulatory standards shall require placement in street rights-of-way, especially within residential neighborhoods and Rural Areas, unless such a location is not feasible or not consistent with service quality and access.

2. Cable Services

King County Ordinance No. 10159 dictates current policy for cable services. It states in part: "it is the County's policy to promote the widespread availability of cable service and diverse information to County residents and to encourage the development of cable systems and cable technology as a means of communication between and among members of the public and public institutions."

The county's cable-related needs are expressed in the following policies:

F-((~~337~~))<u>347</u> Long-term planning for cable systems should include service to all areas of the county which meet the minimum density established in the cable company's franchise agreement and the county's Cable Television Ordinance.

F-((~~338~~))<u>348</u> Cable companies should provide services that meet the cable-related needs and interests of all segments of the community, taking into account the cost of meeting such needs and interests.

F-((~~339~~))<u>349</u> Cable companies should take affirmative steps to ensure that reasonable services are available regardless of income or the income of other people in the person's neighborhood.

F-((~~340~~))<u>350</u> The goal of long-term cable planning should be a high-capacity, state-of-the-art system. Two-way capacity should be installed and activated. Cable systems should be interconnected to other communications systems. They should be designed to be "open"; that is, the systems should be usable by many, for a variety of purposes.

F-((~~341~~))<u>351</u> Public uses of the cable system should be expanded as the system is upgraded.

3. Internet Access

Rapidly changing technologies are providing opportunities for alternative work environments and lifestyles as more people transmit and receive information through the internet. Although there is a growing interest in the use of computer technologies, few new developments are including high-speed internet access lines or home cabling. King County encourages private partnering between developers, builders and communication providers to expand the opportunities for access to the internet.

F-((342))352 Developers should collaborate with major employers to create developments that facilitate and encourage telecommuting by installing high-speed internet lines during construction of the project.

F-((343))353 Builders and architects should work with the telecommunication industry to design state-of-the art cable-ready homes and offices.

Wireless internet connections, also referred to as "hotspots," first conceived in 1993, now number over 300,000 nationally. A hotspot is a location (park, coffee shop, airport, office building. etc) that offers Wi-Fi access. Hotspots allow the public to use laptop computers, Wi-Fi phones or other suitable portable devices to access the Internet. Ninety percent of the hotspots in the nation are free. Of the estimated 150 million laptops and 14 million personal digital assistants (PDAs) sold annually, most include Wi-Fi capability.

F-354 King County encourages public and private organizations to create wireless internet connections where the public can access the Internet. This will create additional opportunities to reduce traffic, lower GHG emissions and enhance convenient information exchange.